

REMARKS/ARGUMENTS

1.) Withdrawal of Prior Bases of Claim Rejections

In the office action dated June 29, 2009, the Examiner rejected all claims as being anticipated by Hurtta, *et al.* (WO 01/91382).¹ In response to that office action, the Applicant amended independent claims 1 and 17 to include the limitations of claims 2 and 18, respectively, which were cancelled, and submitted arguments to traverse the claim rejections. In the subsequent non-final office action, dated March 15, 2010, the Examiner rejected all pending claims as obvious over Hurtta in view of Chotai (U.S. Patent No. 5,907,805). In response to that office action, the Applicant cancelled claims 10-16 and 25-29 in order to expedite prosecution (leaving claims 1, 3-9, 17 and 19-21 pending in the application), and submitted arguments traversing that new basis of rejection. In the subsequent office action, dated September 8, 2010, the Examiner rejected all then pending claims (1, 3-17 and 19-21) as being unpatentable over Hurtta in view of Bjelland, *et al.* (U.S. Patent Publication No. 2003/0153309). Again, the Applicant submitted arguments traversing the claim rejections. In the present office action, the Examiner has rejected all pending claims as obvious over Hurtta in view of Cain (U.S. Patent Publication No. 2004/0028018); *i.e.*, the Examiner still relies on Hurtta as the primary referenced, while substituting Cain for Bjelland as the secondary reference. The Applicant thanks the Examiner for recognizing that the claims are not obvious over Hurtta in view of Bjelland. **For the reasons that follow, the claims are also not obvious over Hurtta in view of Cain.**

2.) Claim Rejections – 35 U.S.C. §103(a)

The Examiner has now rejected claims 1, 3-17 and 19-21 as being unpatentable over Hurtta, *et al.* (WO 01/91382) in view of Cain (U.S. Patent Publication No. 2004/0028018). The Applicant traverses the rejections.

¹ Although the Examiner referred to WO 01/91382 as "Haumont" in that office action, the first-named inventor is Hurtta, as properly used by the Examiner in each subsequent office action. In the present office action, however, the Examiner mistakenly refers to that reference as "Hutta."

Claim 1 recites:

1. A method in a communication apparatus for maintaining an established connection between said communication apparatus and a network node of a serving communication network, comprising the steps of:

receiving an acceptance message from said network node in response to a request message relating to a first procedure transmitted to said network node;

determining whether any request relating to a second procedure is pending; and,

transmitting to said network node, if any request is pending when said acceptance message is received, a maintaining request for maintaining said connection, wherein the step of transmitting said maintaining request is executed if the pending request is received **after** the request relating to the first procedure is transmitted and before said acceptance message is received.
(emphasis added)

The Applicant's invention is directed to solving a problem identified in the prior art that is reflected in the teachings of Hurtta. As noted at page 4, line 5, *et seq.*, of Applicant's disclosure, "there is a problem in the prior art that the [Follow On Request (FOR)] has to be incorporated into the first message for establishing the connection." At page 4, line 20, *et seq.*, the Applicant identifies Hurtta as disclosing a "Follow-on request [that] is sent in the [first] message if there is pending uplink traffic." (emphasis added) Thus, the Applicant identified Hurtta as teaching the very problem that Applicant's invention solves. As noted by the Applicant at page 4, line 7, *et seq.*, "if . . . an establishment request [is received] after the request for a [first] procedure has been transmitted and before the established connection has been terminated, the connection might be terminated although a procedure is pending and awaiting service." (emphasis added) It is the undesired termination of an established connection that the Applicant's invention prevents.

As described by the Applicant at page 15, line 7, *et seq.*:

"As is known in the art, if the GMM unit receives the connection establishment request relating to a second procedure from the upper layers before the REQUEST relating to a first procedure is transmitted, a Follow-On Request (FOR) may be attached to the REQUEST relating to the first procedure. Then, the established connection will be maintained

when the procedure relating to the first procedure is finished, wherein the connection does not have to be established again.” (emphasis added)

In other words, as was known in the prior art, if a connection establishment request relating to a second procedure is received before a REQUEST message relating to a first procedure is transmitted, a Follow-On Request can be attached to the request relating to such first procedure. The Applicant's invention, however, addresses the situation when such an establishment request relating to a second procedure is received after a REQUEST message relating to a first procedure was transmitted. Hurtta does not address that situation. As disclosed by the Applicant at page 16, line 3, *et seq.*:

“According to the invention, the upper layers (or the internal GMM event) may issue a connection establishment request relating to a second GMM procedure after the REQUEST message relating to the first GMM procedure has been transmitted to the network GMM unit. If the ACCEPT message issued in response to the REQUEST message relating to the first procedure has not been received before the connection establishment request relating to the second procedure is received from the upper layers, the FOR request may according to the invention be incorporated into the COMPLETE message finishing the procedure relating to first GMM procedure. A single bit in the COMPLETE message may implement the FOR request, wherein “1” indicates that FOR is valid, and “0” indicates that FOR is not valid. If FOR in the COMPLETE message is valid, the network GMM unit will maintain the connection, otherwise the connection is terminated when the procedure relating to the first GMM procedure is terminated.” (emphasis added)

According to the invention as recited in claim 1, a “maintaining request” is transmitted to the network node if any request is pending when an acceptance message is received; the acceptance message is received from the network node in response to the request message relating to a first procedure transmitted to the network node. In the embodiment described by Applicant, a FOR request incorporated into the COMPLETE message finishing the procedure relating to the first procedure corresponds to such a “maintaining request.” The “maintaining request” is transmitted “if the pending request is received after the request relating to the first procedure is transmitted and before said acceptance message [relating to the first procedure] is received.” **As acknowledged by**

the Examiner, Hurtta does not teach that functionality. (Present Office Action; page 4, line 3, *et seq.*)

To overcome the acknowledged deficiency in the teachings of Hurtta, the Examiner now looks to the teachings of Cain; specifically, paragraph [0061]. Cain, however, fails to overcome the deficiencies in the teachings of Hurtta. As noted *supra*, the Examiner has acknowledged that Hurtta fails to teach a “maintaining request” that is transmitted “if the pending request is received **after** the request relating to the first procedure is transmitted and before said acceptance message [relating to the first procedure] is received.” Cain likewise fails to teach that condition for transmitting the maintaining request.

In paragraph [0061], Cain describes various confirmation and acknowledgement messages, to wit:

[0061] Reliable confirmation messages may be provided with a couple of different approaches. An initiating mobile node transmits a request for time slots to the receiving mobile node, which transmits a reply to the initiating mobile node. The initiating mobile node transmits a confirmation to the receiving mobile node, and the receiving mobile node transmits the reply again **if the confirmation is not received**. Alternatively, the receiving mobile node may transmit an acknowledgment to the initiating mobile node, and the initiating mobile node transmits the confirmation again **if the acknowledgment is not received**. (emphasis added)

At best, Cain describes conventional techniques for handshaking between transmitting and receiving nodes to confirm whether or not a message has been received. Nothing that the Examiner has pointed to in Cain, however, addresses the problem solved by the Applicant’s claimed invention; *i.e.*, the situation when an establishment request relating to a **second** procedure is received **after** a REQUEST message relating to a **first** procedure was transmitted. Cain, like Hurtta does not address that situation and, therefore, it fails to overcome the acknowledged deficiency in the teachings of Hurtta. Therefore, the Examiner has not established a *prima facie* case of obviousness for claim 1.

Whereas claims 10, 17 and 25 recite limitations analogous to those of claim 1, they are also not obvious over Hurtta in view of Cain. Finally, whereas claims 3-9, 11-

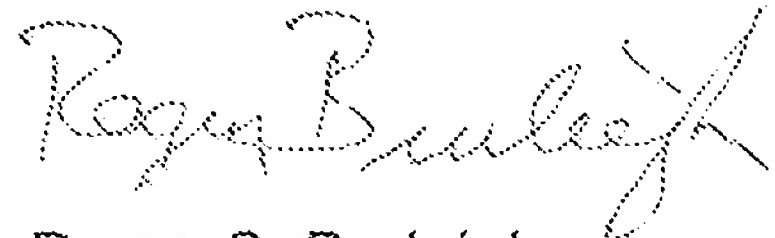
16, 19-21 and 26-29 are dependent from claims 1, 10, 17 and 25, respectively, and include the limitations thereof, they are also not obvious over Hurtt in view of Cain.

CONCLUSION

In view of the foregoing remarks, the Applicant believes all of the claims currently pending in the Application to be in a condition for allowance. The Applicant, therefore, respectfully requests that the Examiner withdraw all rejections and issue a Notice of Allowance for claims 1, 3-9, 17 and 19-21.

The Applicant requests a telephonic interview if the Examiner has any questions or requires any additional information that would further or expedite the prosecution of the Application.

Respectfully submitted,



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Date: June 6, 2011

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